



Channel Islands National Marine Sanctuary Sanctuary Superintendent's Report

Volume 5, Number 1 • March, 2007



A report for the Sanctuary Advisory Council and Sanctuary Constituents

ABOUT THE SANCTUARY

Designated in 1980, the Channel Islands National Marine Sanctuary (CINMS or sanctuary) consists of an area off the coast of California of approximately 1,243 square nautical miles adjacent to the following islands and offshore rocks: San Miguel Island, Santa Cruz Island, Santa Rosa Island, Anacapa Island, Santa Barbara Island, Richardson Rock, and Castle Rock, extending seaward to a distance of six nautical miles. The islands vary in distance from 12 to 40 nautical miles offshore from Santa Barbara and Ventura counties in southern California.

A fertile combination of warm and cool currents in this area results in a great variety of plants and animals including kelp forests, fish and invertebrates, pinnipeds, cetaceans and sea birds. The sanctuary also has a wealth of maritime heritage resources including Chumash Native American artifacts and over 100 historic shipwrecks. Human uses in the area include commercial and recreational fishing, marine wildlife viewing, boating, diving, kayaking, maritime shipping, nearby offshore oil and gas development, research and monitoring, and numerous educational activities.

MANAGEMENT PLAN REVIEW

Channel Islands National Marine Sanctuary (CINMS or sanctuary) staff continue to analyze and respond to 674 comments received on the Draft Management Plan/Draft Environmental Impact Statement (DMP/DEIS). As a testament to the broad and diverse nature of comments received, approximately 540 of the 674 comments are unique, independent suggestions, while only about 114 are duplicative of other comments. As staff have moved ahead with drafting responses to comments, consulting with National Marine Sanctuary Program (NMSP) headquarters and West Coast Region staff and leadership as needed, the draft documents are being modified into a Final Management Plan, Final Environmental Impact Statement, and Final Rule.

As reported at the January 19th Sanctuary Advisory Council (Advisory Council) meeting, the NMSP plans to issue a Supplemental Notice of Proposed Rulemaking and Supplemental Draft Environmental Impact Statement, likely this spring, as a necessary step toward completion of the management plan process. These supplemental documents will be released in order to ensure that the public has adequate information and opportunity to comment on the possibility of sanctuary regulation of graywater and sewage discharges from large vessels (300+ gross registered tons), and in light of the possibility of inconsistency between the sanctuary's preferred alternative discharge regulation and the recently enacted California Clean Coast Act. The supplemental documents will be streamlined to avoid unnecessary reprinting of information available in the DMP/DEIS, and will be made available for public review and comment. Comments received on the supplemental documents will be considered and integrated into the Final Management Plan, Final Environmental Impact Statement, and Final Rule.
(Continued on next page.)

Window on the Sanctuary

The Pacific harbor seal (*Phoca vitulina*) pupping season on San Miguel Island extends from February through May. Photo: CINMS Library.



Sanctuary staff will continue to provide updates on the Supplemental Notice of Proposed Rulemaking, Supplemental Draft Environmental Impact Statement, Final Management Plan, Final Environmental Impact Statement, and Final Rule at upcoming Advisory Council meetings and via the sanctuary's web site (<http://channelislands.noaa.gov/manplan/overview.html>).

For more information, contact Michael.Murray@noaa.gov or Sarah.MacWilliams@noaa.gov.

RESOURCE PROTECTION

Marine Reserves Federal Rulemaking Process

Staff have reviewed and drafted initial responses to public comments, prepared an internal draft final environmental impact statement (FEIS) and Final Rule, and have submitted these documents to the West Coast Region for review and clearance to the NMSP headquarters level. Staff anticipate an April 2007 release of the FEIS to the public. Related to this action, the California Coastal Commission will make a consistency determination at their March 14th through 16th meeting in Monterey.

SANCTUARY ADVISORY COUNCIL

Sanctuary Advisory Council sets 2007 Work Plan

In January the Sanctuary Advisory Council (Advisory Council) adopted an ambitious 2007 Work Plan. The plan calls for high priority attention to be devoted to such important tasks as:

- tracking outer continental shelf oil and gas inventory activities;
- developing recommendations about best standards for open ocean aquaculture activities;
- commenting on a CINMS supplemental notice of proposed rulemaking concerning regulation of large vessel discharge of sewage and graywater;
- assisting with public outreach when the CINMS Final Management Plan/Final EIS is published;
- reviewing and providing input on biological monitoring programs focusing on marine reserves;

- tracking reauthorization of the National Marine Sanctuaries Act;
- recommending actions to enhance education and public relations for the CINMS; and
- understanding more about sanctuary monitoring programs (beyond marine protected area monitoring).

In addition, the Advisory Council will track many other mid- and lower-level priority topics, and leave room for new issues that might emerge throughout the year.

Remaining 2007 Advisory Council meetings will take place on March 16 (Ventura), May 18 (Santa Barbara), July 20 (Ventura), September 21 (Santa Barbara), and November 16 (Ventura). The Advisory Council's 2007 Work Plan will be posted on line at http://channelislands.noaa.gov/sac/report_doc.html.

Draft Report on Open Ocean Aquaculture and the Channel Islands National Marine Sanctuary Released

On January 19th the Advisory Council's Conservation Working Group released a draft report on open ocean aquaculture. Conservation Working Group volunteers prepared the 83-page report, entitled "Open Ocean Aquaculture and the Channel Islands National Marine Sanctuary—Feedlots in the Wilderness?" over the prior 18 months. The report includes information about environmental concerns associated with open ocean fin fish aquaculture, the environmental setting for and likelihood of such operations developing within the Santa Barbara Channel, the regulatory and policy setting for open ocean aquaculture, and a broad range of precautionary recommendations for how sanctuary management and stakeholders should evaluate future aquaculture proposals. The report has sparked much discussion among sanctuary constituents, and was available for review through February 13th. The Advisory Council hopes to bring together a panel of science and policy experts to further discuss open ocean aquaculture issues at their March 16th meeting in Ventura. The draft report is available on line at: http://www.channelislands.noaa.gov/sac/report_doc.html. For more information, contact michael.murray@noaa.gov.

VESSEL & AIRCRAFT OPERATIONS

Vessel Program Support

Research and Monitoring

From February 20th through 23rd *Shearwater* supported a Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) dive project with University of California Santa Barbara (UCSB) scientists.

Winter Repairs

Shearwater went into dry dock at Ventura Harbor Boat Yard during the second full week of January. During the three-week repair period, anti-fouling paint was re-applied to both hulls below the waterline. In addition, the thru-hull portion of an automated modular weather monitoring and logging system was installed. The remainder of that system—environmental sensors and devices designed to interpret incoming data—has not yet been shipped to CINMS, but will most likely arrive and be installed this spring. CINMS will provide updates identifying the types of data that will be collected and the applications of those data in the next report.

Annual Inspection

Vessel crewmembers devoted a portion of the winter maintenance period to preparing for *Shearwater's* mandatory annual Fleet Safety Inspection, originally scheduled for February 15th through 16th. Unfortunately, the inspector “got stuck” in one of the recent severe weather events that took place on the east coast, forcing the inspection to be postponed until late-April or mid-May.

Aircraft Maintenance and Operations

As reported in January, the sanctuary's SeaWolf aircraft remains grounded due to a needed engine overhaul.

RESEARCH AND MONITORING

Sanctuary Represented at International Monitoring Workshop

On February 6th and 7th, Dani Lipski (Sanctuary Research Assistant) attended the Commission for Environmental Cooperation (CEC) marine monitoring workshop for “Ecoregion 19,” which extends from Point Conception to Cabo San Lucas. The purpose of the CEC is to

encourage collaboration and protection of trans-boundary ecosystems between Canada, the U.S., and Mexico. An environmental agreement complementary to the North American Free Trade Agreement (NAFTA) created the CEC. Lipski represented the sanctuary among colleagues from universities, private institutions, and U.S., California, and Mexico resource agencies. On day one workshop attendees discussed on-going monitoring projects at their sites, and on day two discussed common bio-physical indicators that could be used to “score” the health of the ecoregion. The participants were interested in developing a product similar to the Sanctuary Wide Monitoring Report (SWiM Condition Report), and discussed some aspects of the report for inclusion in the ecoregion report. For more information, contact Danielle.Lipski@noaa.gov.

Channel Islands Naturalist Corps (CINC) Volunteer Research Assistance

CINC volunteers continue to conduct plankton tows on board the R/V *Shearwater* as part of a statewide study on Harmful Algal Blooms. The tows are done in cooperation with Plumes and Blooms research cruises scheduled throughout the year. In addition to conducting plankton tows, this year CINC volunteers will assist with a benthic larval settlement study in conjunction with the Channel Islands National Park (CINP or park) and UCSB. They will collect samples two times per month at Anacapa Island. They will also be on board the R/V *Shearwater* for several of seabird monitoring trips. For more information about the CINC please see p. 8.

EDUCATION, OUTREACH AND VOLUNTEERS

Bay Watershed Education and Training Program (B-WET)

Laura Francis (Sanctuary Education Coordinator) was a lead instructor for a Teacher Enrichment Adventure (TEA-WET) training on January 6th. TEAWET is a B-WET funded professional development project for teachers that is administered by the Gevirtz Research Center and Graduate School of Education at UCSB. TEAWET focuses on watershed issues in Santa Barbara and Ventura counties. Participating teachers discover



new ways to use inquiry and the local environment to teach science, and how to use the watershed, from mountaintops to creeks to beaches, as a context for teaching social studies, art, language skills, math, and other disciplines. Francis' presentation and activity focused on watershed connections to the ocean and sanctuary, kelp forest monitoring, and underwater monitoring using a remotely operated vehicle (ROV). Twenty teachers representing Oxnard, Santa Barbara, and Lompoc schools attended the training, which was held at the Ty Warner Sea Center in Santa Barbara, California.



Teachers testing mission creek water quality during a Tea-Wet Workshop with the CINMS and Ty Warner Sea Center.
Photo: Laura Francis.

Channel Islands Argonauts Program Back-up and Running!

On January 5th, twenty-two 4th-8th grade level students were nominated as Channel Islands Argonauts (Argonauts) to advocate for coastal and marine environments during the 2006-2007 school year. A judging panel composed of staff representing CINMS, CIMP, and the Ventura County Superintendent of Schools Office selected the Argonauts. Selection criteria included the quality and content of applicants' essays, and their leadership profiles. The nominated Argonauts are residents of the four main cities in the Santa Barbara Channel region (Santa Barbara, Carpinteria, Ventura, and Oxnard).

On January 20th, the 2006-2007 Argonauts, their parents and peers participated in an orientation meeting, which Rocío Lozano-Knowlton (Argonauts Coordinator) organized, at the CIMP visitor center auditorium. During

the orientation meeting Lozano-Knowlton presented the Argonauts with a wide choice of community events, local conservation projects, and a boat trip to the Channel Islands in which they could participate as environmental advocates between February 17th and June 5th. The Argonauts chose the events they will participate in (depending on proximity to their residences), and committed to producing posters related to either Channel Islands habitats, marine reserves, or watershed and ocean-connection. The posters will be presented on March 20th at the CIMP visitor center auditorium. The Argonauts will also have the opportunity to meet CINMS and CIMP staff during field trips and at outreach events.

On February 17th, the Argonauts who reside in Santa Barbara County had their first hands-on experience in a conservation project during their trip to Coal Oil Point Reserve (COPR). Christina Sandoval (COPR Manager) and her staff briefed the Argonauts on the importance of restoring natural habitats, and informed them of the threats invasive plants represent. Chris Mobley (Sanctuary Superintendent) participated on this field trip and acted as a mentor and role model. All students, COPR staff, and sanctuary staff (including Mobley) worked hard in removing ice plant from the banks of the COPR slough. Afterwards, a COPR researcher briefed the students on COPR's research projects, and snowy plover (an endangered shorebird) protection. The Argonauts' trip ended with exploring the COPR tide pools, and identifying marine invertebrates and algae.

The Argonauts program is part of the B-WET sponsored Channel Islands Live! Program, in which the CINMS, CIMP, and Ventura County Office of Education are partner organizations. For more information on this program contact Rocio.Lozano@noaa.gov.

From Shore to Sea Lecture Series

On January 9th and 10th, Daniel Muhs (U.S. Geological Survey Geologist) shared evidence from the Channel Islands about the last period of global warming that occurred about 125,000 years ago. This remarkable warm period has received much attention lately due to the information it may yield about future warming trends. We are currently in an interglacial period that started about 10,000 years ago at the close of the most recent "Ice Age," or glacial period. Prior to this glacial period, there was a warm interglacial period lasting 15,000 years or more. During his presentation Muhs shared evidence

of this period collected from marine deposits in the Channel Islands, Hawaii, Bermuda, and the Florida Keys. Muhs discussed the characteristics of this previous warm period and explained the global implications should similar conditions develop again.

The sanctuary, park, and Santa Barbara Maritime Museum jointly sponsor the "From Shore to Sea" lecture series in an effort to further the understanding of research on the Channel Islands and surrounding waters. The programs are free and open to the public. The lectures take place at 7:00 p.m. on one Tuesday and Wednesday per month, with Tuesday lectures at the Santa Barbara Maritime Museum's Munger Theatre, and Wednesday lectures at the Channel Islands National Park Robert J. Lagomarsino Visitor Center. For upcoming lectures please refer to the sanctuary calendar on p. 15, or for the complete schedule of 2007 lectures please visit the sanctuary's From Shore to Sea web page:

<http://www.channelislands.noaa.gov/edu/shoretosea.html>.

Sanctuary Training for New Channel Islands National Park Staff

In early January Julie Bursek (Sanctuary Education Coordinator) provided a sanctuary overview to new employees and volunteers of the park's visitor center. Visitor center staff learned about the NMSP and different sanctuary resources (brochures, website, etc.) available for the public. The overall feedback was very positive and the park plans to schedule more orientations with the sanctuary in the future.

Marine Science Institute Partnership

Magic Planet Training

Laura Francis participated in a full day of Magic Planet training at UCSB on February 1st. Designed by Global Imagination the Magic Planet is a portable, internally projected sphere, mounted on a specially designed frame. Driven by a laptop computer, a projector displays spherical images created from a potentially limitless number of data sets. Data sets used include images of Earth and other bodies in our solar system. Visuals can be paused, rewound, and exhibit equatorial or arbitrary rotation, all at controlled speed for maximum insight into the data at hand. Some of the Earth projections include infrared satellite data depicting the

development of storm systems as they move across the globe, sea surface temperatures depicting El Niño and La Niña events, an animation depicting 600 billion years of continental drift, and images of Earth's topography and bathymetry. Additional data sets depict the surface of the Sun, Moon, Mars, and other bodies in our solar system. The National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA) are major contributors to the datasets utilized with this technology. Global Imagination partners with their customers to share a community of content, imagery and exhibits available and accessible to all customers using the Magic Planet. For more information, please visit www.globalimagination.com.

Outreach Center for Teaching Ocean Science (OCTOS) Teacher Advisory Meeting

Laura Francis and Scott Simon from the UCSB Marine Science Institute co-chaired an OCTOS teacher advisory meeting on January 25th.

Participating teachers have been studying online data sets that may potentially be incorporated into the OCTOS program. They are also advising on the best way to use a planned eelgrass habitat tank to teach sixth-eighth grade California Science Content Standards.

School Outreach



Laura Francis works with children from the Montessori Center School on Feb 8th. Photo: Susan Drake.

On January 26th, Laura Francis presented a program

about whales and dolphins of the sanctuary to 24 preschoolers at the Montessori Center School in Goleta. The children's favorite part of the presentation was listening to whale sounds from the Voices of the Sea web site (<http://cet.uscsd.edu/voicesinthesea.org/Flash/>). On February 8th, Francis and Scott Simon brought the Mobile REEF Aquarium and Magic Planet to the same school as part of their unit on marine life of the Santa Barbara Channel

Multicultural Education for Resource Issues Threatening Oceans (MERITO)

The MERITO Academy Program

The goal of this program is to build sanctuary stewardship and increase understanding of ocean related threats among underserved fifth to eighth grade students through the implementation of marine and watershed educational activities in their classrooms and in the field. The MERITO Academy works to achieve these goals by providing Hispanic serving educators with training on and tools for the California Education Standards aligned MERITO Academy curriculum, and by providing sanctuary staff guidance and covering transportation costs for related field trips.

The MERITO Academy is a B-WET sponsored partnership between CINMS and Channel Islands Marine Resource Institute in collaboration with a cradle of local organizations. For more information contact: Rocio.Lozano@noaa.gov.

MERITO Academy Teacher Training Workshop

On Feb. 3rd Rocío Lozano-Knowlton (Sanctuary MERITO Coordinator) coordinated the follow-up workshop for the eleven teachers and educators participating in the pilot MERITO Academy program. During the workshop the teachers received instruction on how to implement the MERITO Academy curriculum, and MERITO Academy staff received feedback from the teachers on how to further improve the curriculum content. The workshop included a UCSB Marine Science Institute Mobile REEF program demonstration of the 16" Magic Planet Interactive Globe, and teacher training in Long-Term Monitoring Program and Experiential Training for Students (LiMPETS) sandy beach and rocky inter-tidal monitoring protocols.



Teachers implementing the sand crab monitoring protocols (LiMPETS) during the Pilot MERITO Academy follow-up workshop on Feb 3, 2007 at UCSB campus point. Photo: Noemi Estrella



Michelle Kissinger (UCSB MSI Education Assistant), training MERITO Academy teachers how to implement NMSP rocky intertidal monitoring protocols at UCSB Campus point during the MERITO Academy follow-up workshop Feb 3, 2007. Photo: Rocío Lozano-Knowlton

The UCSB Marine Science Institute Mobile REEF program will be presenting the Magic Planet, and touch tanks containing Channel Islands marine invertebrates to each of the eleven MERITO Academy classes between March 1 and June 30, 2007. This project will reach 330 MERITO Academy students.

MERITO Academy Field Trips

On Jan 18th and 25th, Lozano-Knowlton led two field trips for 62 fifth grade students from the SAGE Charter

School in Ventura as part of the CINMS MERITO Academy program. The students visited the Ormond Beach Wastewater Treatment Plant, tested the water quality of the bubbling springs, and participated in the Ormond Beach native plant restoration project sponsored by Oxnard.

On January 19th Lozano-Knowlton, in collaboration with the Santa Barbara City Creeks Division, coordinated 66 students' efforts to restore Sycamore Creek in Santa Barbara as part of the CINMS MERITO Academy program. The students, fifth and sixth grade English Language Learners from Santa Barbara's Cesar Chavez Charter School, tested creek water quality, planted native plants provided by the city along the banks of the creek, and learned the benefits that native plants provide to our creeks and ocean water quality.



5th and 6th grade students from Cesar Chavez Charter School in Santa Barbara restoring native plants at Sycamore creek as part of the CINMS MERITO Academy program in collaboration with Santa Barbara City Creeks Division. Photo: Rocío Lozano-Knowlton

On January 23rd Laura Francis and Lozano-Knowlton led a field trip as part of the MERITO Academy for 65 fifth grade Hispanic English Language Learners from Drifill Elementary School in Oxnard. Students learned how to sample water and measure parameters such as dissolved oxygen, temperature, turbidity, and PH. They also learned how to identify shorebirds, toured the Oxnard Wastewater Treatment Plant, and participated in native plant restoration at Ormond Beach, sponsored by Oxnard and led by the city's volunteer staff.

On January 30th, the Santa Barbara City Creeks Division sponsored the transportation of 65 fifth and sixth grade students from the Cesar Chavez Charter School to El Estero Wastewater Treatment Plant, where they received a 90-minute tour of the plant as part of the MERITO Academy program.

On February 15th, Lozano-Knowlton, Natalie Senyk (Sanctuary Scientific Advisory), Marie Leslie (State Park Ranger), and Andrea Moe (Islands Packers Education Coordinator) instructed a group of 65 fifth grade students from Ventura's SAGE Charter school on how to implement the LiMPETS sandy beach and rocky intertidal monitoring protocols, and collected data at Frenchy's Cove, Anacapa Island. This trip initiated the second round of the MERITO Academy field trips.

Also on February 15th, Laura Francis and Shannon Newby from the Channel Islands Marine Resource Institute led a group of 30 fifth grade students from Harding School in Santa Barbara on a field trip to Bohnett Park. The students conducted water quality testing and worked with representatives from the Santa Barbara City Creeks Division to do a park trash clean up and plant native plants. This field experience was part of the students' pledge to become ambassadors for the park that is within walking distance of their school.



Fifth grade MERITO Academy students from Santa Barbara's Harding School have pledged to become ambassadors of Bohnett Park. Photos: Eric Osborne.

On Feb. 20th, Shannon Newby and Noemi Estrella (CINMS bilingual intern) led a watershed education field trip for 25 fifth grade students from Canalino Elementary in Carpinteria. They visited the local wastewater treatment plant, worked on native plant restoration with

Suzanne Feldman from the Community Environmental Council, and tested the quality of the Carpinteria Creek.

Channel Islands Naturalist Corps (CINC) Volunteer Program

January and February Whale Watch Vessel Excursions
Santa Barbara's *Condor Express* led dolphin cruise/island excursions five days per week in January, and the first two weeks of February with CINC volunteers. Whale watching trips started every day in mid-February. The Santa Barbara Sailing Center's *Double Dolphin* hoisted sails 29 times starting in mid-February with naturalists aboard. Captain Don's Whale Watch discontinued cruises on the *Rachel G* in 2007, and brought on board the *Harbor Queen* to run eight afternoon trips in February.

Island Packers had 33 trips from Ventura Harbor in January and 40 in February, and 11 from Oxnard in January and 13 in February. The *Speedtwin* completed 11 whale watching trips out of Channel Islands Harbor in January, and 46 in February.

Although this is typically gray whale season, three humpback whales were observed in the Channel on February 16 in the midst of a feeding frenzy. Also in the mix were Dall's porpoises, huge rafts of sea lions, and a pod of Risso's dolphins.

January and February Island Programs

CINC island hike naturalists participated in four Island Packers trips to Anacapa from Ventura in January, one in February from Ventura, and three from Channel Islands Harbor. In addition, there were eight trips to Scorpion Anchorage, Santa Cruz Island for certified naturalists in January, and five in February. The only other naturalist-led trip was to Frenchy's Cove, Anacapa Island for tidepooling in January.

Channel Islands Naturalist Corps Island Hike Training

34 Channel Islands Naturalist Corps volunteers are currently certified to lead hikes at the Channel Islands. The remaining 22 naturalists who attended this year's training are now "shadowing" seasoned volunteers on island hikes as part of the certification process.

Training for New CINC Volunteers

Training has concluded for our thirty-seven new CINC volunteers. The sanctuary and park held a special

training and potluck on February 3rd in order to officially "graduate" this new group of enthusiastic, eager volunteers. Trainees had been divided into special training pods with assigned mentors, who were also officially recognized for their assistance with training. Each pod successfully participated in a whale watch training trip led by a mentor to complete their training, in addition to passing a comprehensive exam. (*Read a story about one pod's first adventure at sea on p. 9!*)

In 2007, 135 volunteers will donate thousands of hours representing the sanctuary and park aboard public whale watching and island hike tours, at community outreach events, and at local schools. In addition, CINC volunteers collect important data on marine mammal sightings, and assist with other sanctuary and park research and education programs.

On February 20th, the first monthly CINC in-service meeting was held in Ventura. Several veteran naturalists presented interpretation techniques, and volunteer Barbara LaCorte, gave a CINMS A to Z PowerPoint presentation. The March 20th CINC meeting will include a presentation of the documentary *Sand, Sun, Oil & Gas* with Janet Bridgers Funder & Director, Earth Alert, and a presentation on NOAA's Oil Spill Response Network by Ben Waltenberger (Sanctuary Physical Scientist).

Public Outreach

Sanctuary Hosts Marine Mammal Viewing Guidelines Workshop with NOAA Fisheries

On January 25th the sanctuary hosted a Marine Mammal Viewing Guidelines Workshop in partnership with the Protected Resources Division of the NOAA Fisheries Southwest Region. The workshop was held for members, captains, and crew of the Santa Barbara Sailing Center, which operates sailing, kayaking, and whale watch charters in the Santa Barbara Channel. Shauna Bingham (Sanctuary Volunteer Outreach Coordinator) provided an overview of the sanctuary, and Joe Cordero (NOAA Fisheries) provided information regarding marine mammal viewing guidelines and the Marine Mammal Protection Act. For more information, contact Shauna.Bingham@noaa.gov.



SPOTLIGHT ON VOLUNTEERS

Channel Islands Naturalist Corps Volunteer Field Report, February 10, 2007

The Xantus's murrelets have fledged! That is, the “Xantus’s murrelets pod” of CINC volunteers in training whom I mentored. What a Day we had on our Saturday mentor trip! First of all, the weather was a surprise; expecting a deluge, we actually experienced partially clear skies and sunshine out at the islands. The conditions were beautiful and dreamlike - grayish white light and flat, mirror like seas. It was mesmerizing!

On our way out to the Santa Cruz Channel (the cut between Santa Cruz and Santa Rosa islands) we saw several groups of dolphins (Bottlenose, Risso's, and a megapod of approximately 1,500 Commons). *Condor Express* Captain Matt, photographer Eric Zimmerman, and videographer David Beezer, and I discussed whether the Commons we were seeing were of the Short or Long-beaked variety. The conclusion was Long-beaked.

We cruised for awhile before we found our first pod of south-bound gray whales - a pair in front of us. But suddenly behind us, a gray whale breached and we turned the boat around.

This is my fifth season of gray whale watching and I have never experienced such an amazing spectacle. We stayed with what we believe was a mating pod of three for a quite a long time, watching them rolling, showing us amazing views of their stubby pectoral flippers, fluking and spy hopping and occasional shallow breaches. While the whales were cavorting, they were surrounded by Risso's dolphins. Then suddenly there was another pod of three displaying very similar behaviors so we moved to watch them.

Altogether we saw four pods of traveling gray whales before we moved down the northern coastline of Santa Cruz Island to the mouth of Painted Cave.

There were also excellent bird sightings – pigeon guillemots, pelagic cormorants, and a couple of Cassin's auklets, and of course, pelicans, and gulls galore.

The “murrelets” on board did an excellent job – answering questions, providing additional commentary, and generally being wonderful ambassadors for the sanctuary and the park. Congratulations, CINC graduates. It was my pleasure to work with you!

- Barbara LaCorte,
*Channel Islands Naturalist Corps
Volunteer*



Sanctuary to Partner with State Parks and California Welcome Center in Oxnard

On January 31st, Shauna Bingham represented the sanctuary at a meeting with the park, regional California State Parks, and the U.S. Forest Service to discuss collaboration on outreach and exhibit opportunities at the new California Welcome Center in Oxnard. The new center is one of thirteen in California, and is sponsored by the Oxnard Convention and Visitors Bureau. In 2004, more than 1.1 million travelers visited California Welcome Centers.

Sanctuary Briefs Los Angeles/Long Beach Harbor Safety Committee

Chris Mobley gave a presentation to the Los Angeles/Long Beach Harbor Safety Committee on February 7th at the Port of Long Beach. The Harbor Safety Committee includes representatives of the ports, pilots associations, shipping industry, and state and federal agencies. Mobley described a number of sanctuary activities that may be of interest to the committee, such as assisting in the expansion of the southern California vessel tracking system into the Santa Barbara Channel via installation of a monitoring station on Santa Cruz Island. Mobley also described the National Marine Sanctuary Program's use of collaborative, science-based efforts to assess and resolve potential shipping impacts, citing two examples: the refinement of the "Area to be Avoided" shipping management off of Olympic Coast National Marine Sanctuary in order to reduce the risk of major oil spills, and the re-routing of the vessel traffic lanes at Stellwagen Bank National Marine Sanctuary in order to reduce the risk of collisions with large whales.

El Camino School Family Science Night

On February 27th, one of our experienced volunteers manned a booth at the El Camino School Family Science Night in Santa Barbara. He shared information about the Santa Barbara Channel and the Channel Islands, as well as a whale tail matching activity which helps students understand the application of marine science to an endangered species.

MARITIME HERITAGE PROGRAM

Volunteer Linked to History of Shipwreck *Del Rio*

Channel Islands Naturalist Corps (CINC) volunteer Paul Petrich Jr. recently learned that during the last shipwreck reconnaissance expedition aboard the CINMS Research Vessel (R/V) *Shearwater* the dive team recorded the site of the shipwreck *Del Rio*, a commercial fishing vessel lost at Anacapa Island in 1952. Petrich's father once owned the purse seiner, which had a most interesting role in WWII as the USS *Grosbeak* AMC 192. Following conversion to an auxiliary minesweeper at Alameda, California, *Grosbeak* joined Mine Division 1 at San Francisco Bay and nearby waters, but she was also used for training reserve and junior officers in small boat handling and minesweeping. *Grosbeak* was decommissioned September 12, 1944. Her name was struck from the Navy List and she was returned to her former owner at San Pedro in 1945. Petrich and Robert Schwemmer (Sanctuary Maritime Heritage Coordinator) are working together to provide a future web based history of the *Del Rio*'s seventeen year career as a commercial fishing vessel, and of her military role.



Del Rio During Harbor Festival. Photo: Courtesy Paul Petrich Jr. Collection.

For more information on the shipwreck *Del Rio*:
channelislands.noaa.gov/shipwreck/dbase/cinms/delrio.html

Regional Maritime Heritage Program

Shipwreck WILLIAM H. SMITH

Recent winter storm waves uncovered the wooden remains of a shipwreck at Del Monte Beach in the Monterey Bay National Marine Sanctuary (MBNMS). Schwemmer worked with MBNMS staff and the Monterey Maritime and History Museum who identified the shipwreck as the five-masted schooner *William H. Smith*. Before the schooner was stranded in 1933, it once traveled the world's oceans as a three-masted full-rigged down-easter and was built in Bath, Maine in 1883. Schwemmer arrived on site on February 5th and found the shipwreck remains were once again covered over with sand.

For more information on the shipwreck *William H. Smith*: channelislands.noaa.gov/shipwreck/dbase/mbnms/wmhsmith.html



Remains of the *William H. Smith* at Del Monte Beach, Monterey Bay National Marine Sanctuary. Photo: Erica Burton.

USS MACON To Be Featured in Documentary

Schwemmer and MBNMS staff members Rachel Saunders, Erica Burton and Dawn Hayes met with Niko Guenther of SPIEGEL TV to discuss a documentary on the *USS Macon* 2006 expedition. Schwemmer provided a presentation to summarize the 2005 and 2006 expedition accomplishments and the NMSP's maritime heritage program. SPIEGEL is a subsidiary of the German "Der Spiegel" magazine and the largest independent production company in Germany, co-producing with ZDF, BBC, Discovery, and National Geographic. Their most recent documentary, released in

January 2007, featured the German U-boat 864 lost off Norway and aired on the Discovery Science Channel. Upon reaching an agreement with a U.S. production company, filming of the *USS Macon* documentary would start in the summer of 2007, and the film would be released in 2008.

1871 Whaling Fleet Disaster

Schwemmer completed the first phase of an historic context study for shipwrecks associated with the 1871 whaling fleet disaster that occurred in the Arctic region of Alaska. The study supports a joint project of the NMSP Director's Office, West Coast and Pacific Islands regions, in collaboration with the NMSP's maritime heritage program. Throughout the nation's thirteen national marine sanctuaries and the Northwestern Hawaiian Islands Marine National Monument is a shared whaling heritage that links early whaling cultures, as well as many submerged maritime heritage resources. The Alaskan shipwrecks, and the over 1200 survivors that sailed for Hawai'i have direct links to the Pacific Islands, West Coast and New England regions.

Society for Historical Archaeology's 40th Annual Conference

NOAA was well represented at the Society for Historical Archaeology's 40th Annual Conference on Historical and Underwater Archaeology, held January 10-14 in Williamsburg, Virginia. The NMSP conducted three symposia: "Building on a 200-Year Tradition: NOAA's National Marine Sanctuary Program;" "New Orders for *USS Monitor*: A Look at the Monitor's Past, Present, and Future;" and "Preservation Through Access: NOAA's Thunder Bay National Marine Sanctuary." Thirteen NMSP staff and five NMSP partners gave presentations, along with two NOAA staff who presented in other symposia. Schwemmer authored a paper, presented by Bruce Terrell (NMSP Senior Archaeologist), entitled "Bringing Home the *Macon*; Recording the Archaeological Remains of a 'Flying Aircraft Carrier.'"

2007 Symposium on Maritime Archaeology and History of Hawai'i and the Pacific

The 2007 Symposium on Maritime Archaeology and History of Hawai'i and the Pacific was held February 17-19 in Honolulu. Schwemmer authored a paper, presented by Dr. Kelly Gleason (NMSP Pacific Islands Region Maritime Heritage Specialist) on the MBNMS' *USS Macon* 2006 expedition. The joint collaboration between Pacific Islands and West Coast regions provides a great

opportunity to share with the academic community and public, the maritime heritage program's archaeological expeditions in the Pacific.

To learn more about the USS *Macon* Expedition please visit:

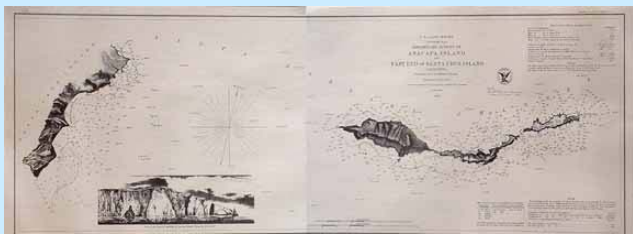
sanctuaries.noaa.gov/missions/2006macon/welcome.html

Channel Islands: Stories From The Past

One hundred and fifty-one years ago this month a *New York Times* article reported on the Coast Survey activities at the Channel Islands. The original article, as printed, appears below.

GENERAL LAND OFFICE. – *The Coast of California.* – We were shown, yesterday, at this office, a beautiful map of the survey of Anacapa [sic] Island, and the eastern part of Santa Cruz Island, situated in the channel of Santa Barbara, which survey was executed and returned to this office by the Superintendent of the Coast Survey. On these maps are exhibited, with much accuracy, the precise character of the coast and the elevations and depressions of the land. This will prove valuable information to navigators and others. We understand, however, that further operations are necessary to subdivide the islands into tracts before sales can be made. The Coast Survey have in charge the survey of all the islands on this coast, with a view to their sale as other public lands, so that those who fancy ocean homes may, before long, obtain the object of their desire. – *Union.*

New York Times, March 28, 1856



1856 Coast Survey Map of Anacapa Island.

WEB SITE (<http://channelislands.noaa.gov>)



Recent Updates

Visit the web pages listed below to see recently updated sections of the CINMS web site.

Check out the 'new and improved' CINMS home page which offers users an additional sanctuary wide search feature. <http://channelislands.noaa.gov>.

What's new with Research and Monitoring? The 2007 Vessel schedule for the R/V *Shearwater* is now online including an updated page on vessel necessities, required safety considerations, cruise plans and what to bring. Check out:

<http://www.channelislands.noaa.gov/res/vessel.html> and http://www.channelislands.noaa.gov/res/vessel_nec.html.

The complete list for the 2007 From Shore to Sea Lecture Series is now available in PDF format at:

<http://channelislands.noaa.gov/edu/shoretosea.html>.

Don't forget to check out our calendar of events to find out what's happening locally:

<http://channelislands.noaa.gov/focus/calendar.html>.

Upcoming Modifications

The Marine Reserves Education & MERITO web sections are in the final stages of testing and set to launch in Mid- March 2007. Discussions are in progress regarding west coast regional content development for the shipwreck database, and additional audio podcasting for the From Shore to Sea Lecture Series. The research section of the site is scheduled to host information on the Marine Applied Research & Exploration (MARE) work conducted over 2006.

Please take a few moments to peruse the site. Your feedback is greatly appreciated. Comments and suggestions can be sent to amy.cale@noaa.gov.



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND NATIONAL MARINE SANCTUARY PROGRAM (NMSP) NEWS



Secretary of Commerce Announces Partnerships to Develop ROV Workshop for Students and Teachers

In his visit to High Tech High in San Diego, California, Secretary of Commerce Carlos M. Gutierrez spoke to students about the importance of math and science in keeping America's economy competitive. He announced the NMSP's partnership with the school to offer workshops on building undersea robots called ROVs to teach students about technology and how it is used in national marine sanctuaries. The NMSP has been working with many partners, including the Marine Advance Technology Education (MATE) Center, and Tufts University, to develop this program for the past five years.

NOAA Leaders Meet with Department of Interior on National System of Marine Protected Areas

NOAA Assistant Administrator Jack Dunnigan, NOAA Senior Policy Advisor Mike Snyder, and staff from the National Marine Protected Areas Center met with Department of Interior (DOI) Assistant Deputy Secretary Kameran Onley, and key staff from DOI Bureaus to discuss the national system of marine protected areas (MPAs). The group met to share ideas about how national conservation systems co-managed by DOI could serve as potential models for the national MPA system. The National Trails System, National Wilderness System, and National Wild and Scenic Rivers system each has a national conservation mission that operates in close partnership with Congress and nongovernmental organizations. The discussion comes as the public comment period on the draft Framework for Developing a National System of Marine Protected Areas draws to a close on February 28.

Florida Keys Eco-Discovery Center Grand Opening

On January 13th in Key West the Florida Keys National Marine Sanctuary hosted a grand opening ceremony for the Florida Keys Eco-Discover Center, in partnership with the U.S. Fish and Wildlife Service, the National Park Service, and the South Florida Water Management District. This state-of-the-art facility was created to inspire students, local residents, and visitors to become

good stewards of the unique Florida Keys ecosystem, and help visitors develop an appreciation and personal responsibility for protecting the Florida Keys and south Florida ecosystem. The festivities included a donor recognition breakfast, grand opening ceremony, ribbon cutting, premiere of the Center's orientation movie, and activities for the children.

Suspected Torpedo Found in Monterey Bay National Marine Sanctuary

Operations to remove a suspected 1945 era torpedo from the Monterey Bay National Marine Sanctuary allowed NOAA to showcase its assets in a coordinated multi-agency project with the U.S. Navy and U.S. Coast Guard. A recreational diver reported discovering an unexploded torpedo in the sanctuary on November 28, 2006. The sanctuary worked with the Navy and Coast Guard to address the potential threat. The Navy's explosive ordinance recovery team determined that the torpedo was not explosive and successfully removed it.

2006 Coastal Resource Management Survey Results

Results from an extensive survey of local, state, and federal coastal resource management professionals are now available online at www.csc.noaa.gov/survey. NOAA's Coastal Services Center conducts the periodic survey to better understand the issues and needs of the nation's coastal management community, which includes state regulatory and natural resource management agencies, coastal and marine protected areas, emergency managers, and others concerned with coastal resource management.

Federal Agency Report on Implementation of MPA Executive Order Available for FY2005-2006

Seven federal agencies, including diverse programs supporting MPA planning and management, completed a biannual report on the status of implementation of Executive Order 13158 on MPAs. The Order calls for NOAA and the Department of the Interior to lead the development of a national system of MPAs in cooperation with other Federal, State, territorial, and tribal governments, as well as stakeholders. The report

describes key milestones in this process and is posted at www.mpa.gov.

Marine Debris Bill (S. 362) Signed by President

The "Marine Debris Research, Prevention, and Reduction Act" (S. 362) was signed into law by the president on December 22, 2006. This bill establishes programs within NOAA and the U.S. Coast Guard to identify, reduce, and prevent marine debris and its effects on the environment and navigational safety. For more information, visit <http://thomas.loc.gov/>.

International Management Capacity Building

Laura Francis developed and disseminated an evaluation form for instructors of the November 2006 Planning for Sustainable Tourism Management Capacity Building Training on Gorgona Island, Colombia. Instructor feedback on the course will help to improve future trainings, will assist recruitment of additional instructors, and may improve the ability to raise funds for planned future Management Capacity Building training efforts.

Francis provided updates to the International Management Capacity Building Web site (<http://www.sanctuaries.nos.noaa.gov/management/international/mpa.html>) including curriculum materials in both Spanish and English, instructor biographies, Eastern Tropical Pacific Seascape site-specific sustainable tourism demonstration projects, new photos and workshop notes. Materials are expected to be put online by the NMSP web team by the end of February.

Workshop Helps Spread the Word About Ocean Literacy Campaign

NMSP staff conducted the second of two California Ocean Communicator Alliance workshops on December 11th at the Headlands Institute in Sausalito to discuss the statewide "Thank You Ocean" public awareness campaign. Participants for both workshops totaled more than 90 statewide communicators of ocean issues, including organizations, agencies, and businesses. The workshops included presentations on the campaign elements, and the campaign handbook, which advises

ocean communicators on how to incorporate the campaign into their work. The workshops yielded a list from the participants of action items that each will take to promote the campaign.

NOAA Booth Star of Conference

The booth featuring NOAA's 200th Anniversary and the NMSP was the "star attraction" just inside the entrance of the American Association for the Advancement of Science (AAAS) Conference Hall in San Francisco. The conference was held February 16th through February 19th. Founded in 1848, AAAS serves some 262 affiliated societies and academies of science, serving 10 million individuals, and publishes the journal "Science."

The eye-catching NOAA booth displayed the California "Thank You Ocean" campaign Public Service Announcement and information, along with NOAA's 200th Anniversary materials and children's activity books. Eric Hackathorn with NOAA in Boulder, Colorado, demonstrated the NOAA "second life" virtual reality world to throngs of visitors, who visited "NOAA Island" on a large screen monitor.

Assessment to Raise Awareness of Apparent Worldwide Sea Grass Decline

The National Centers for Coastal Ocean Science, in collaboration with sea-grass experts from around the world, have found that 65 percent of sea-grass abundance investigations worldwide show declines in the resource, with an accelerating rate of decline evident in the most recent studies. The findings were analyzed as part of an international workshop funded by the National Center for Ecological Analysis and Synthesis (NCEAS) at UCSB. The project will further examine regional trends to evaluate the correlation between sea-grass changes and environmental and human stressors, and will strive to inform resource managers and the public. The project has access to the largest data set ever compiled on the global distribution and abundance of sea grasses.

THREE-MONTH CHANNEL ISLANDS NATIONAL MARINE SANCTUARY CALENDAR

MARCH	
Mar 4	<i>Celebration of the Whales</i> , Channel Islands Harbor http://www.channelislandsharbor.org/events.cfm
Mar 10	<i>Keep Our Seas Plastic Free Festival</i> , Santa Barbara Museum of Natural History, Ty Warner Sea Center http://www.sbnature.org/eventcal/
Mar 11	<i>11th Annual Point Mugu State Park Whale Festival</i> http://www.parks.ca.gov/events/event_detail.asp?id=1792
Mar 13, 14	<i>From Shore to Sea Lecture Series:</i> Christine Hamilton, U.S. Fish and Wildlife Service <i>Xantus's Murrelet Recovery Status</i> Tuesday: 7:00 pm Munger Theater, Santa Barbara Maritime Museum (113 Harbor Way, Santa Barbara) Wednesday: 7:00 pm Channel Islands National Park Visitor Center (1901 Spinnaker Drive, Ventura)
Mar 15	<i>Monte Vista School Science Night</i> http://www.sbceo.org/~mylhsd/
Mar 16	<i>Sanctuary Advisory Council Meeting</i> Channel Islands National Park Visitor Center (1901 Spinnaker Drive in Ventura) An agenda, directions and more information will be posted at: www.channelislands.noaa.gov/sac/announcement.html
Mar 24	<i>Aquarium of the Pacific Long Beach Technology Day</i> http://www.aquariumofpacific.org/index.html
APRIL	
Apr 10, 11	<i>From Shore to Sea Lecture Series:</i> Steven Schwartz, U.S. Navy <i>The Lone Woman of San Nicolas Island</i> Tuesday: 7:00 pm Munger Theater, Santa Barbara Maritime Museum (113 Harbor Way, Santa Barbara) Wednesday: 7:00 pm Channel Islands National Park Visitor Center (1901 Spinnaker Drive, Ventura)
Apr 14	<i>Oxnard Earth Day Festival</i> , Plaza Park in Downtown Oxnard http://environmentalresources.cityofoxnard.org/Department.aspx?DepartmentID=14&DivisionID=4&ResourceID=315
Apr 18	<i>Ventura County Science Fair</i> , Ventura Fairgrounds http://www.vcoe.org/ScienceFair/tabid/686/Default.aspx
Apr 21	<i>Earth Day</i> , Cabrillo Marine Aquarium http://www.cabrilloaq.org/spevents.html
Apr 21-22	<i>Aquarium of the Pacific Long Beach Earth Day</i> http://www.aquariumofpacific.org/index.html
Apr 21-22	<i>Sea Fest</i> , Santa Barbara Maritime Museum http://www.sbmms.org/
Apr 22	<i>CEC Earth Day Festival</i> , Santa Barbara Courthouse Sunken Gardens http://www.communityenvironmentalcouncil.org/Events/Earthday/
Apr 25-29	<i>Santa Barbara Fair & Expo</i> http://www.sbfairandexpo.com/
Apr 28	<i>Gold Coast Science Network</i> , Oxnard College http://members.aol.com/gcsn98/conference.htm
MAY	
May 8, 9	<i>From Shore to Sea Lecture Series:</i> Dr. Peter Sharpe, Institute for Wildlife Studies <i>Bald Eagle Restoration on the Channel Islands</i> Tuesday: 7:00 pm Munger Theater, Santa Barbara Maritime Museum (113 Harbor Way, Santa Barbara) Wednesday: 7:00 pm Channel Islands National Park Visitor Center (1901 Spinnaker Drive, Ventura)
May 18	<i>Sanctuary Advisory Council Meeting</i> Casa Las Palmas (323 E. Cabrillo Blvd. in Santa Barbara) An agenda, directions and more information will be posted at: www.channelislands.noaa.gov/sac/announcement.html

CINMS Staff

Santa Barbara Harbor Office

Christopher Mobley – *Superintendent*
Todd Jacobs – *Deputy Superintendent*
Amy Cale – *Web Developer*
Laura Francis – *Education Coordinator*
Sean Hastings – *Resource Protection Coordinator*
LT Julie V. Helmers – *Executive Officer*
Charles Lara – *Vessel Operator*
Dani Lipski – *Research Assistant*
Sarah MacWilliams – *Management Plan Specialist*
Michael Murray – *Advisory Council and
Management Plan Coordinator*
Luman Moody – *Vessel Captain*
LTJG Kate Peet – *Operations Officer*
Robert Schwemmer – *Regional Maritime Heritage Coordinator*
Natalie Senyk – *Scientific Advisor*
Terrence Shinn – *Vessel Captain*
Ben Waltenberger – *Physical Scientist*
Rebecca Young – *Inventory/Database Coordinator*

Ventura County Field Office

Shauna Bingham – *Volunteer Program and Outreach
Coordinator*
Julie Bursek – *Education Coordinator*
Clare Fritzsche – *CINMS Volunteer Program & Administrative
Assistant*
Lorri Herr – *Program Support Specialist*
Rocío Lozano de Knowlton – *MERITO Coordinator*
Tina Reed – *Education and Outreach Administrator*

CINMS Interns

Michael S. Henry – *Policy, Planning, and Resource Protection
Intern*

NMSP West Coast Region Staff

William Douros – *Regional Superintendent*
Matt Brookhart – *Policy Coordinator*
Nicole Capps – *Management Support Specialist*
Dave Lott – *Operations Coordinator*

NMSP Staff

Columbine Culberg – *Ocean Etiquette Program Manager /
Liaison to Aquarium of the Pacific*
Claire Johnson – *West Coast Education Liaison*
Sarah Marquis – *West Coast Media Coordinator*

Channel Islands Marine Sanctuary Foundation

Donna Schroeder – *Acting Executive Director*

Learn More About Your Sanctuary

The Channel Islands National Marine Sanctuary produces the Sanctuary Superintendent's Report in conjunction with bi-monthly Sanctuary Advisory Council meetings. To learn more about the sanctuary please visit our web site at: <http://channelislands.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:
<http://www.channelislands.noaa.gov/sac/main.html>.

The National Marine Sanctuary Program

The Channel Islands National Marine Sanctuary is one of 13 marine sanctuaries in the National Marine Sanctuary Program. This program was established under the National Marine Sanctuaries Act of 1972 which authorizes the Secretary of Commerce to designate as national marine sanctuaries areas of the marine environment or Great Lakes with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or aesthetic qualities. Visit the NMSP web site at: <http://www.sanctuaries.nos.noaa.gov/>

Channel Islands National Park

To learn about Channel Islands National Park visit their web site at: <http://www.nps.gov/chis/homepage.htm>.

GET INVOLVED AND STAY INFORMED!

To learn how to get involved in the sanctuary visit:
<http://www.channelislands.noaa.gov/focus/involved.html>

Sign up for the CINMS listserv to receive email notices about upcoming sanctuary events, and public meetings of the Sanctuary Advisory Council and its working groups:
<http://www.channelislands.noaa.gov/focus/list.html>

- CONTACT INFORMATION -

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